Midwest Climate Hub

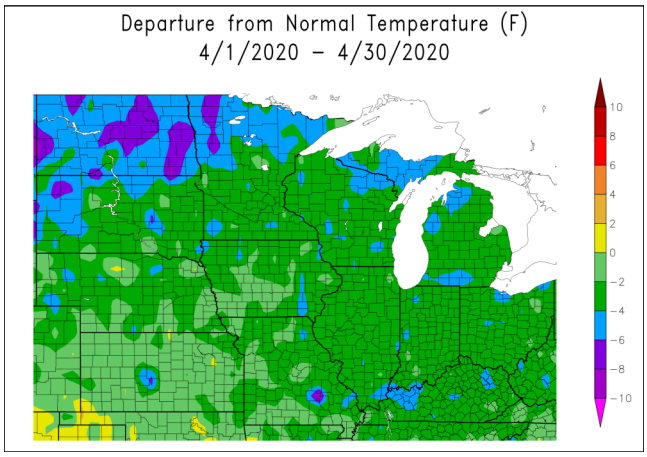
U.S. DEPARTMENT OF AGRICULTURE

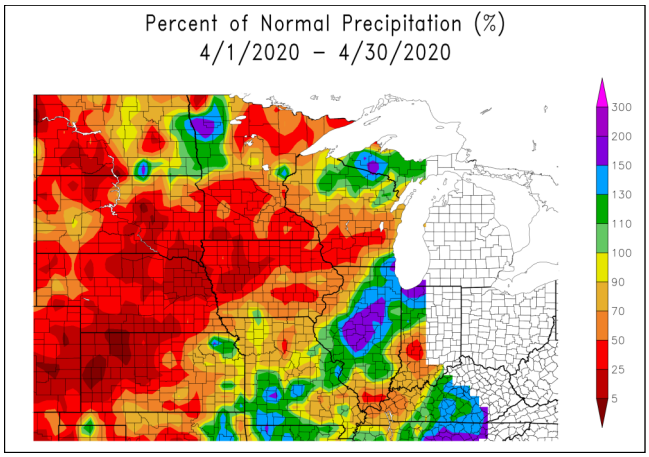
May 1, 2020

Midwest Ag-Focus Climate Outlook

Current Conditions

Conditions have taken a fairly remarkable shift across much of the Corn Belt which has allowed planting to move ahead much more quickly than expected. Precipitation has been pretty limited with well-below-average precipitation over the last 30 days (and much longer in some areas – not pictured). The totals for the last 30 days have been less than an inch in some areas of the plains which is less than half or even to 25% of average in places. The mid-month cold still dominates the 30 day temperature averages with 2-4°F below average common around the region.

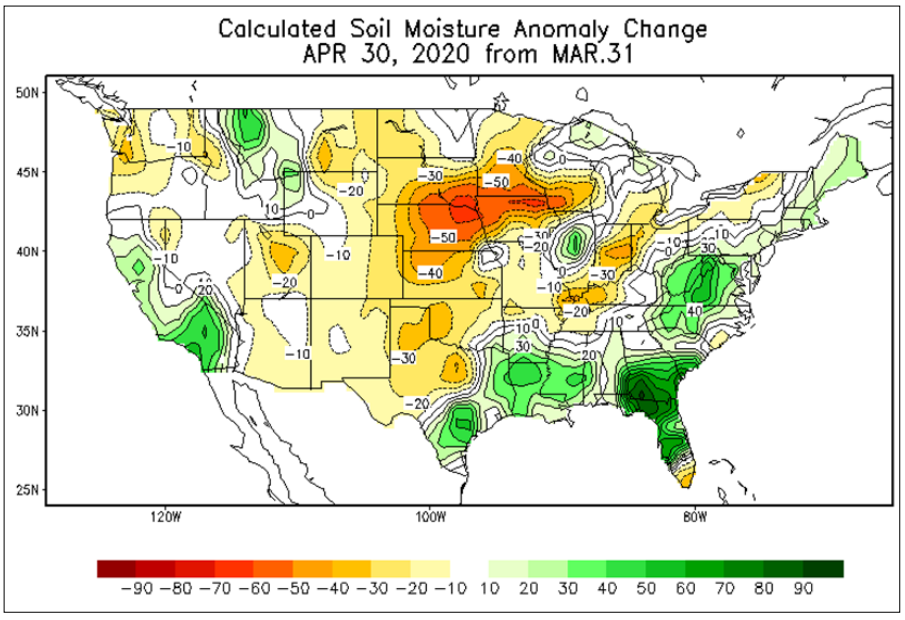




Images from High Plains Regional Climate Center (HPRCC), Online Data Services: ACIS Climate Maps. Generated: 5/1/2020

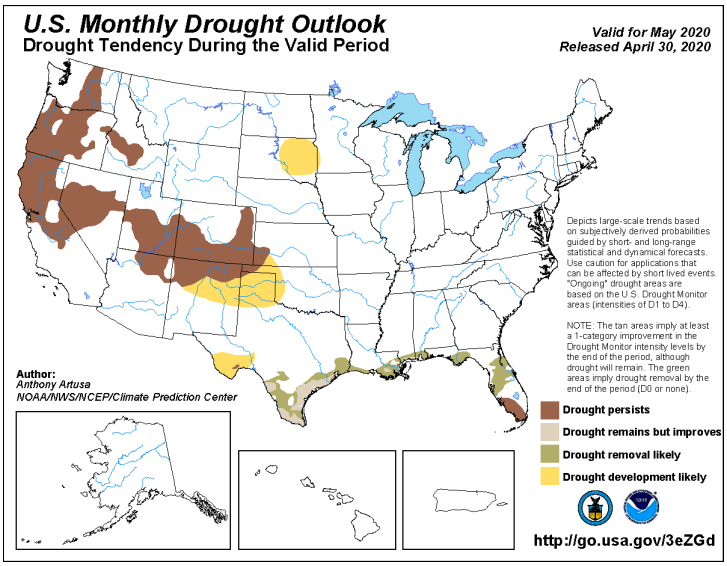
Impacts

The limited precipitation has allowed the surface soils to dry despite the colder-than-average temperatures. Winds have also helped the drying process. One soil moisture model from NOAA's Climate Prediction Center shows a 50 mm (~2 in) loss of moisture in the last month in part of the region as well as decent drying elsewhere. This change has dried surface soils sufficiently to allow more widespread planting than was expected even a few weeks ago. Most of the drying is at the surface. Most soil moisture profiles are still quite full. The drier surface soils are somewhat beneficial in allowing planting and starting to develop root systems, which can reach the soil moisture below.



Soil Moisture Map provided by the Climate Prediction Center

For more information, please visit:
https://www.climatehubs.oce.usda.gov/hubs/midwest



(Impacts Cont.) The dry soils and warmer temperatures in the last couple weeks have helped soil temperatures recover from the cold period very quickly. Planting progress has moved along remarkably quickly after the mid-April cold with corn and bean planting ahead of average in some places. The northern states are the only places where any planting is a little behind average. Local reports have indicated that phenology is also 1-2 weeks behind in northern areas, with the recent colder temperatures.

Reports are still being gathered from the mid-April cold. Some issues have occurred across states from Colorado to Pennsylvania. The worst so far seem to be severe damage to fruit trees in Colorado and some in the eastern states. Winter wheat damage is still being assessed but has occurred in several states, most being in the central/southern plains.

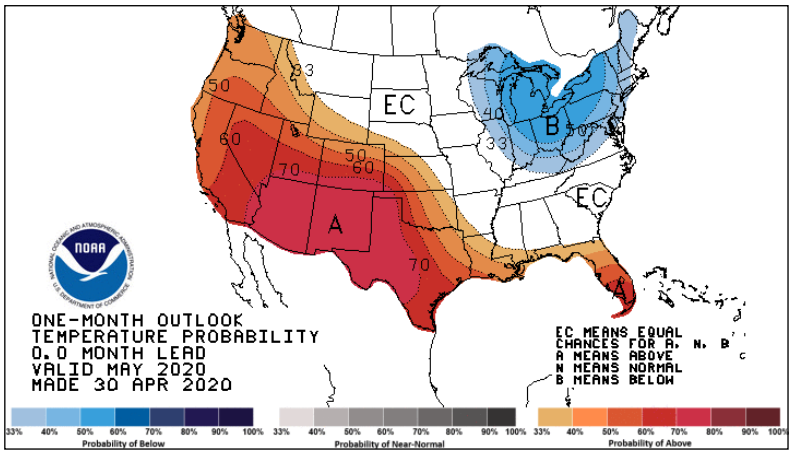
Drought Outlook Maps provided by the Climate Prediction Center

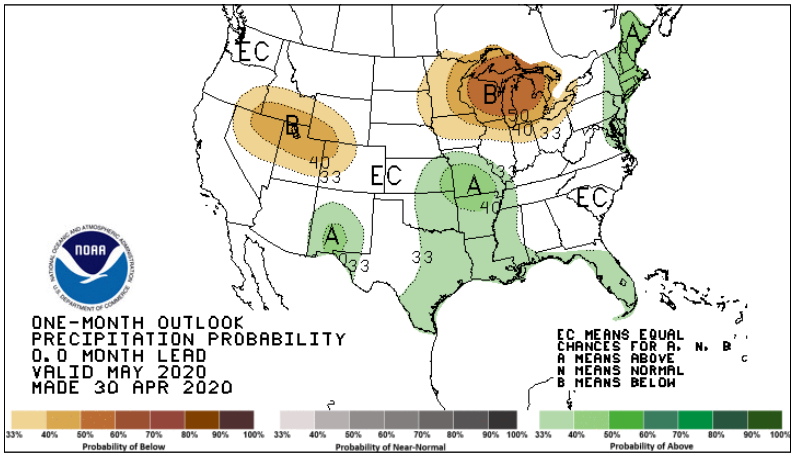
Outlook

The updated monthly outlooks released this week from the National Weather Service Climate Prediction Center point to some similar patterns going into May. Generally, news is still pretty good for agriculture at this point: The largest feature is a pocket of expected colder and drier conditions centered on the Great Lakes. The larger scale pattern is expected to be somewhat persistent with cooler-drier Canadian air coming over the eastern part of the region going into the month. Increased chances of warmth exists in the central plains to the southwest. A slightly increased chance of wetter than average is centered on Missouri.

Early in May the cold over the Great Lakes brings another chance of freezing conditions. The delayed phenology (noted in impact section) may help protect some crops. Recently-planted crops should still be safe. But there is still a risk of damage due to the cold in fruit trees, perennials, alfalfa, etc. The cold will also slow the progress of planted/growing crops in the eastern states.

The developing dryness mainly in the plains/central Midwest, has raised some concerns despite the relatively minor impact so far. Some potential worsening of conditions is noted in eastern South Dakota during May in the US Drought Outlook (see above). Currently, indications do not point to serious increases in drought problems. The potential for damage this early in the season is small. Potential for worsening conditions is being closely monitored by the Midwest Climate Hub and regional/federal partners.





Outlooks provided by the Climate Prediction Center

USDA Midwest Climate Hub
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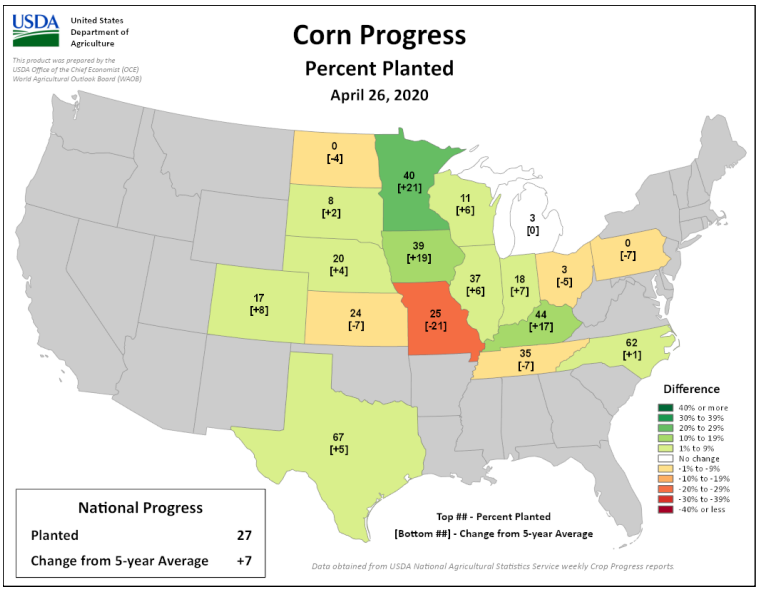
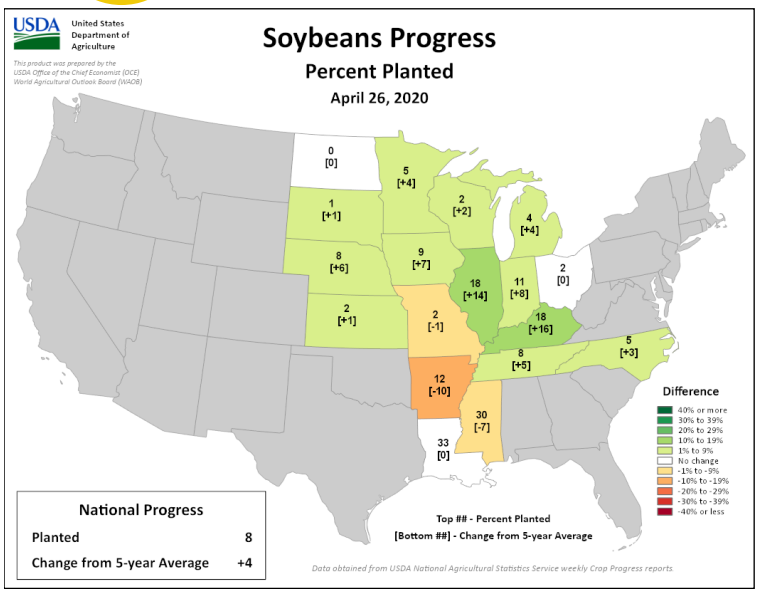
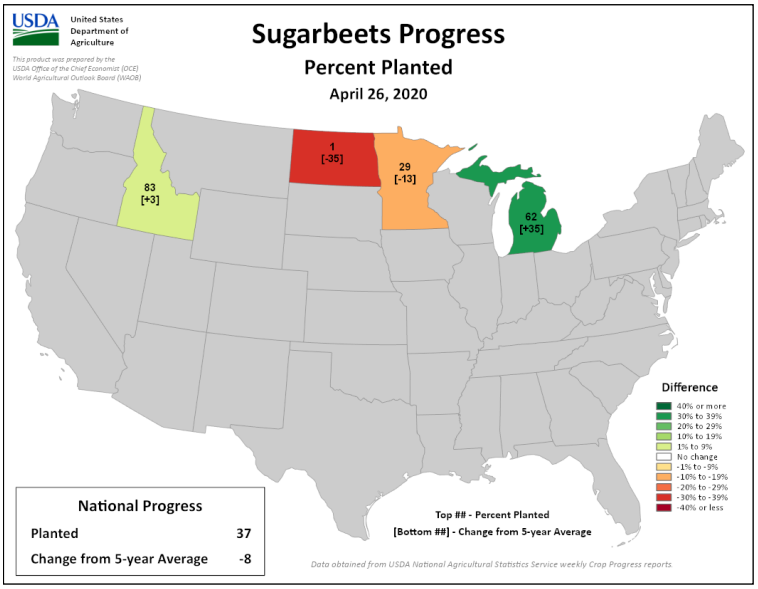
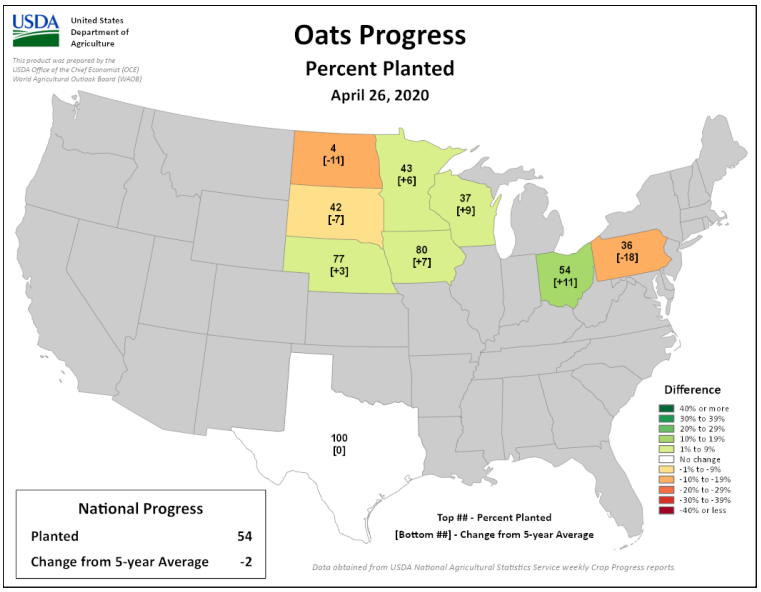
Crop Progress









U.S. Agriculture Progress Maps Supplied by Brad Rippey, USDA [World Agricultural Outlook Board](#).

Partners and Contributors

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